CLAIMS

1. A method for forming a phosphor layer in a gas discharge tube, comprising:

drawing a mother material to fabricate a supporting member which is insertable in a gas discharge tube;

forming a phosphor layer on a surface of the supporting member; and

inserting into the gas discharge tube the resulting phosphor layer supporting member having the phosphor layer formed thereon.

2. The method of claim 1, wherein the fabrication step of the supporting member and the formation step of the phosphor layer are performed sequentially in-line.

3. The method of claim 1, wherein the mother material is made of glass, and the fabrication step of the supporting member from the glass mother material comprises heating and drawing of the glass mother material at a temperature ranging between the softening point and the operating point of the glass mother material.

4. The method of claim 1, wherein the mother material is made of metal and the fabrication step of the supporting member from the metal mother material comprises elongation of the metal mother material at room temperature.

5. The method of claim 4, wherein forming of the metal mother material is performed simultaneously with the elongation at room temperature.

6. The method of claim 4, further comprising the step of roll-forming or press-forming the metal mother material after the elongation at room temperature.

7. The method of claim 6, wherein the press forming is performed while longitudinal tension is placed on the metal mother material.

8. The method of claim 1, wherein the mother material is made of metal oxide or low-melting glass, the method further comprising the step of roll-forming or press-forming the mother material while heating after the drawing of the mother material.

9. A method for fabricating a phosphor layer supporting member for supporting a phosphor layer in a gas discharge tube, comprising:

drawing a mother material having an almost arc-shaped cross section similar to an outer shape of a gas discharge tube to fabricate a supporting member, the supporting member havig an almost arc-shaped cross section of a size that is insertable in the gas discharge tube so as to form a phosphor layer on an arc-shaped internal surface of the supporting member.

10. The method of claim 9, wherein the mother material is made of glass, and the fabrication step of the supporting member from the glass mother material comprises heating and drawing of the glass mother material at a temperature ranging between the softening point and the operating point of the glass mother material.